



January 11, 2017

Mr. Guy Donaldson
Air Chief
U.S. Environmental Protection Agency, Region VI
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re: ADEQ Extension Request for EPA's 2010 SO₂ NAAQS Round 2 Follow-up Data Request

Dear Mr. Donaldson:

On June 2, 2010, the federal Environmental Protection Agency (EPA) promulgated a new primary 1-hour NAAQS for SO₂ at 75 ppb for the 3-year average of the 99th percentiles of the maximum daily values per calendar year. As part of the implementation of the new 1-hour SO₂ NAAQS, EPA has begun requiring either monitoring data or the use of dispersion modeling for areas with facilities emitting SO₂ in quantities greater than the threshold set by the EPA in a three-round schedule.

For Round 2, on September 11, 2015 the Arkansas Department of Environmental Quality (ADEQ) submitted an attainment recommendation and a supportive modeling demonstration for Independence County, AR that was based on SO₂ emissions from Entergy's Independence EGU. On June 30, 2016 ADEQ received correspondence from EPA intending to designate Independence County as "Unclassifiable" based on "insufficient information" and requesting additional information from Arkansas in the form of a combined Entergy Independence EGU/FutureFuel Chemical Company (originally a Round 3 facility now pulled into Round 2) modeling demonstration.

As part of the consultation process with EPA, ADEQ held discussions with EPA staff several times. ADEQ submitted a culpability analysis of each source's individual contributions, which demonstrated that the Entergy Independence EGU was not contributing to elevated receptor concentrations, and subsequently submitted a receptor sensitivity analysis, which demonstrated that elevated receptor concentrations were only occurring on terrain above FutureFuel's stack heights during low wind speeds.

On April 27, 2016, Arkansas also submitted a modeling protocol and model clearinghouse request to employ the Adjusted_U* Beta Option. On September 29, 2016, EPA provided comments on the non-beta option aspects of the modeling protocol to include concerns regarding the data period:

"The protocol indicates that meteorological data, background concentrations, and emissions information for 2012-2014 will be used in the analysis. If available, we suggest conducting the modeling with the latest 3 years of data (2013-2015). If the data period is not updated, we request that information be provided to support that the 2012-2014 data period is representative of the most recent 3 year period."

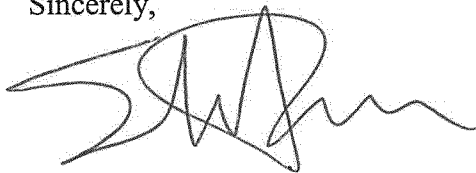
EPA has yet to provide a formal response to ADEQ regarding its request to use the Adjusted_U* Beta Option. In the intervening period, EPA proposed to finalize certain changes to Appendix W including the use of Adjusted_U*. In addition, EPA released a new version of AERMOD (Version 16216) and its associated processors on December 21, 2016.

In order to more accurately demonstrate current SO₂ concentrations in Independence County, ADEQ is working with the two relevant facilities to produce an SO₂ model simulation using the new of version of AERMOD (Version 16216) in addition to the soon-to-be finalized Adjusted_U* option. In addition, ADEQ will use the most recent three years of data available.

ADEQ is in the process of finalizing a modeling task work order with our modeling contractor. Once the task is approved, work will begin on a modelling run utilizing the final revisions to Appendix W and the newest version of AERMOD. ADEQ anticipates that this work will be completed expeditiously, but we realize it will not be completed by January 13, 2017. We hope that the additional time necessary to take advantage of these recent modeling platform enhancements will be viewed in the spirit of cooperation that EPA has exhibited throughout this process and will allow ADEQ the time it needs to produce the most accurate SO₂ model simulation possible for Independence County.

For further information regarding these recommendations, please contact David Clark, Epidemiologist, Arkansas Department of Environmental Quality, by phone at 501-682-0070, or email at clarkd@adeq.state.ar.us.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stuart Spencer', with a stylized, flowing script.

Stuart Spencer

Associate Director
Office of Air Quality
Arkansas Department of Environmental Quality